

PARTS CATALOG

FOR
ONAN
INDUSTRIAL ENGINES
Two Cylinder, Air Cooled

Models

CK-S/35G
CK-S/35H
CK-S/35J
CK-S/35K
CK-S/259K
CK-S/259M
CK-S/259N

**PARTS AVAILABILITY
NO LONGER GUARANTEED**



**DIVISION OF STUDEBAKER- PACKARD CORPORATION
MINNEAPOLIS 14, MINNESOTA**

910-1029

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INTRODUCTION

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This is a composite parts list for ONAN CK Series industrial engines of the specific models shown in the Identification Table below. These engines serve as power for welders.

Engineering design changes by the manufacturer are indicated by an advance in the model specification (SPEC.).

Engines are listed in the following Identification Table by MODEL and SPEC. in the order in which they were manufactured. With each model is a brief resume of the reason for advancing the SPEC. The last column contains reference letters for use in identifying the correct column for each MODEL when selecting parts from the Parts List. Compare the MODEL and SPEC. which appear on the engine nameplate with this table.

IDENTIFICATION TABLE

MODEL NO. AND /SPEC. NO.	REASON FOR CHANGE (General)	APPLICABLE QTY. USED COLUMN
CK-S/35G	Original Design, incorporating: Variable Speed Governor; Fuel Filter; Tapered End on Crankshaft; 4 Quart Capacity Base; and Special Paint on Muffler.	G
CK-S/35H	Single 12 Volt Ignition Coil changed to: two 6 Volt "Autolite" coils installed in the Blower Housing. New adjustable quadrant on Variable Speed Control.	H
CK-S/35J	Changed to: Permatrol Pistons having split skirt and taking Connecting Rod with wider Pin Boss; New Ignition Breaker Box incorporating a Diaphragm on the Breaker Plunger; Forged Governor Yoke.	J
CK-S/35K	Changed to: Cast Iron Magneto Flywheel having Rope Sheave removable; New Magneto having Coil removable; 3 MFD Ignition Condenser; Molded Rubber Carburetor Air Inlet; Beginning with Serial No. 458109, New Fuel Pump having Priming Lever.	K
CK-S/259K	Added: Vacuum Speed-Booster; Throttle Lock. Larger Valve Compartment; Eliminated Gasket Under Exhaust Valve Guide.	L
CK-S/259M	Location of Governor Cup Stop Pin Changed from Cup to Gear Cover. Breather Cap Clamp Deleted.	M
CK-S/259N	Change to: Air Cleaner with Rain Shield & Metal Cup; Oil Intake Cup with 1/4" pipe thrd; Oil Base with Fill Cap and Dip Stick; New Relief Valve.	N

Parts are illustrated in groups and have referenced arrows which compare with the reference numbers in the parts list for that group. Common hardware parts such as screws, washers and nuts which are usually available locally, are not listed.

Characteristics peculiar to these engines are: Crankshaft with tapered power take-off; Four U.S. quart capacity oil base with four point mounting; Fuel filter at carburetor; Mounted fuel tank (furnished as a separate item); Variable-speed governor control; Speed adjusted at 3100 rpm no load for WELDING operation; Ignition timed at 19° B. T. C. spark advance; Plastic shield on face of oil gauge; Special paint on muffler.

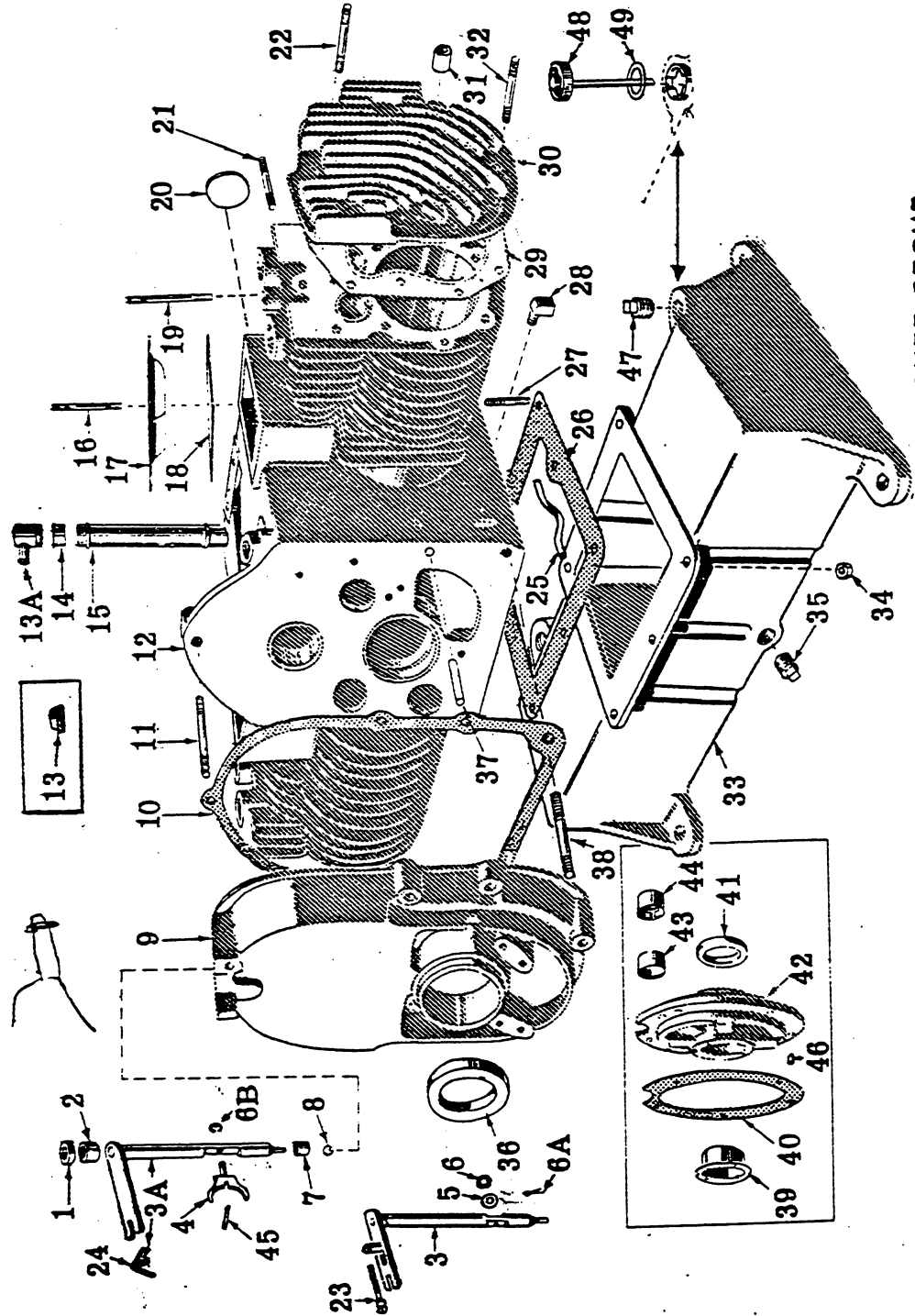


FIG. A-CYL. BLOCK, OIL BASE AND GEAR COVER GROUP

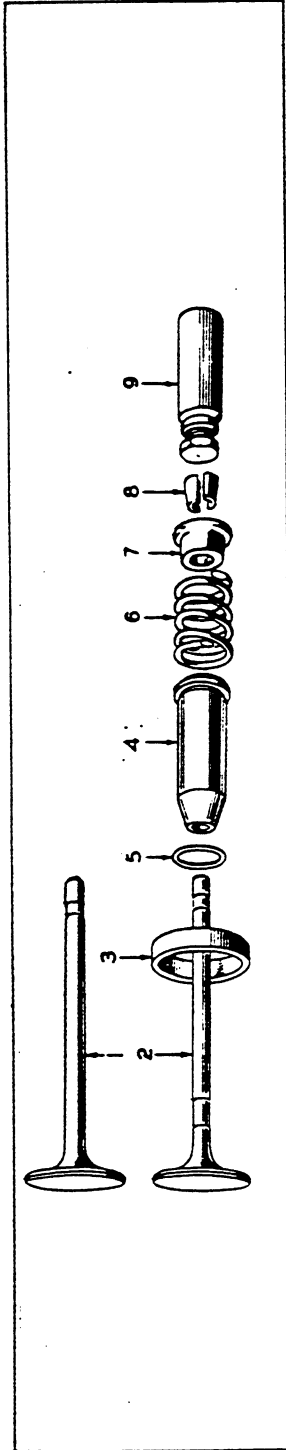


FIG. B-VALVE GROUP

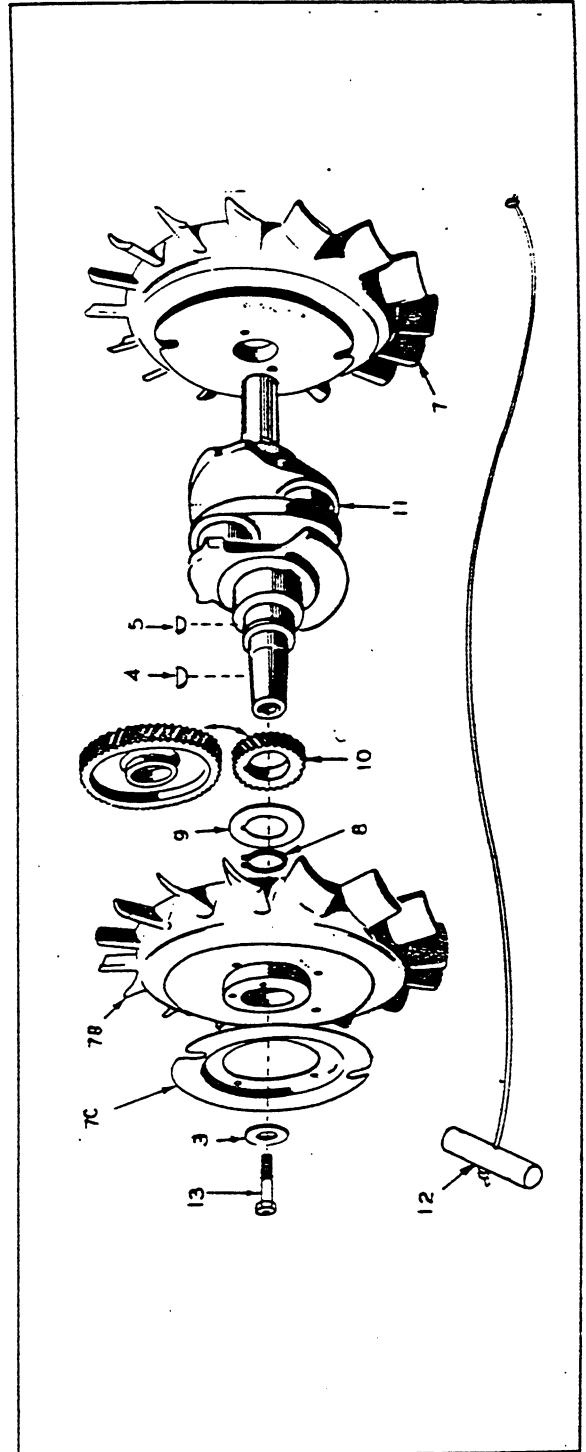


FIG. C-CRANKSHAFT AND FLYWHEEL GROUP

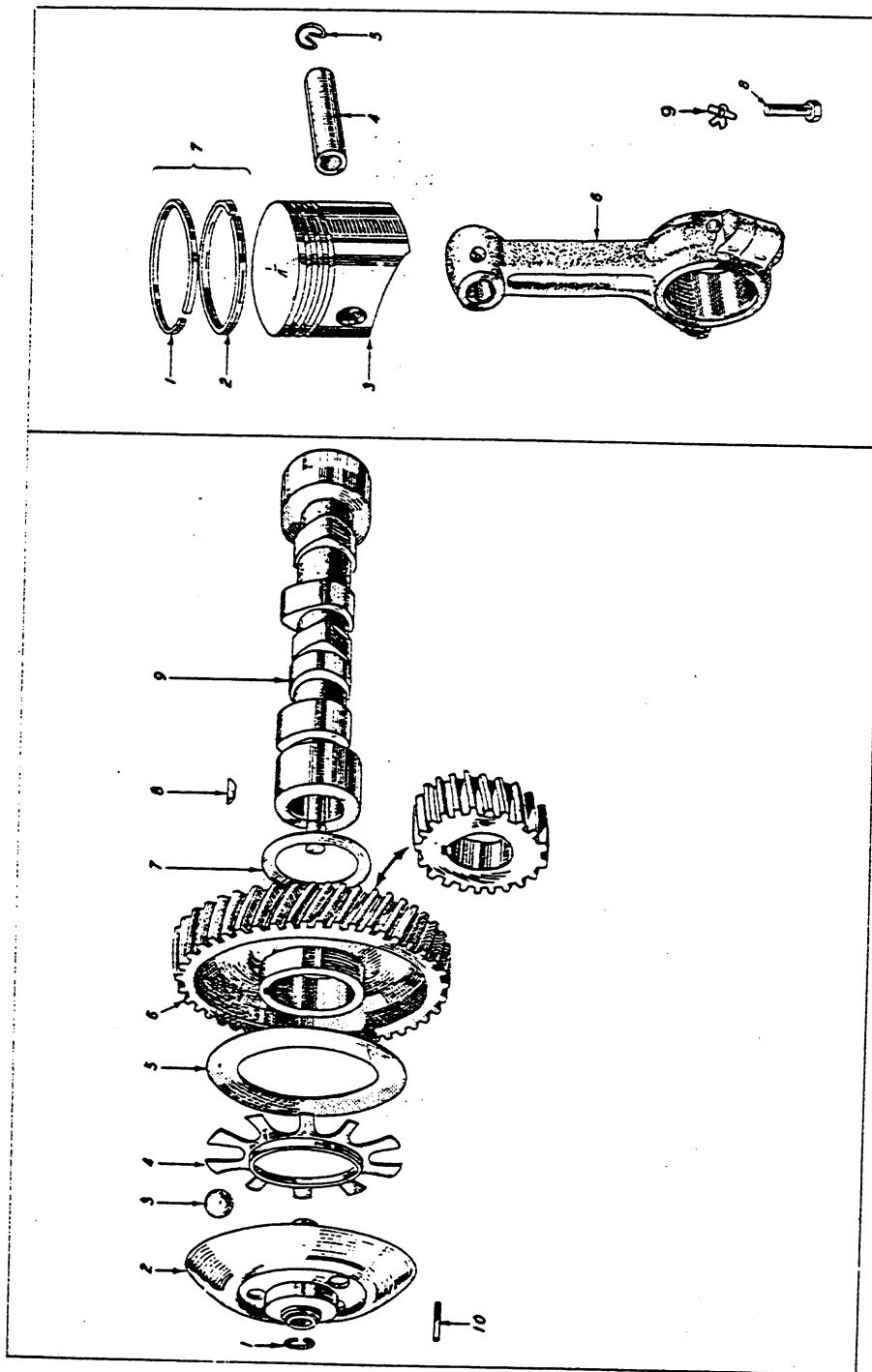


FIG. D- CAMSHAFT GROUP

FIG. E- PISTON AND
CONNECTING ROD GROUP

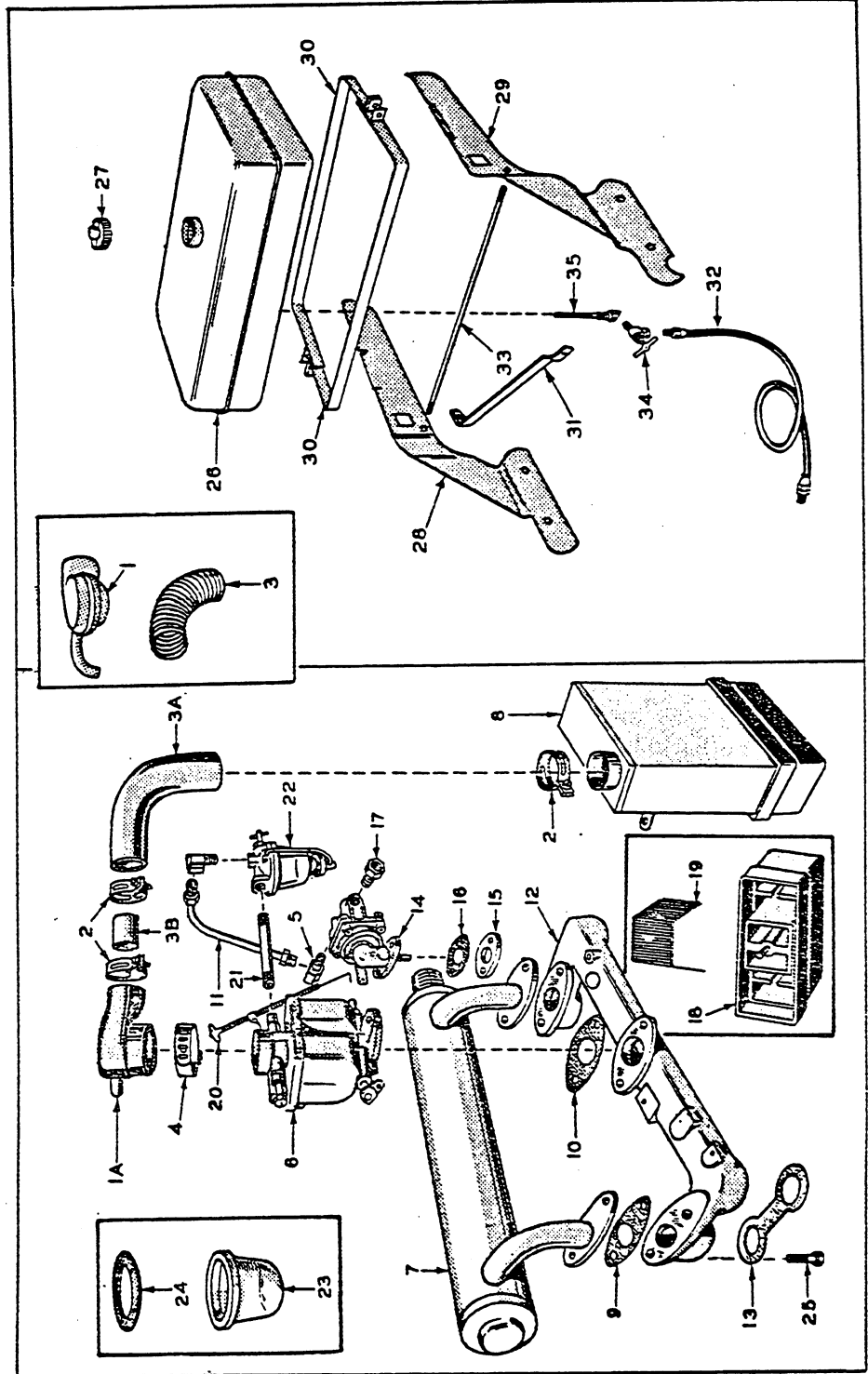
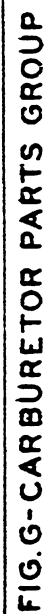


FIG.F-FUEL SYSTEM GROUP



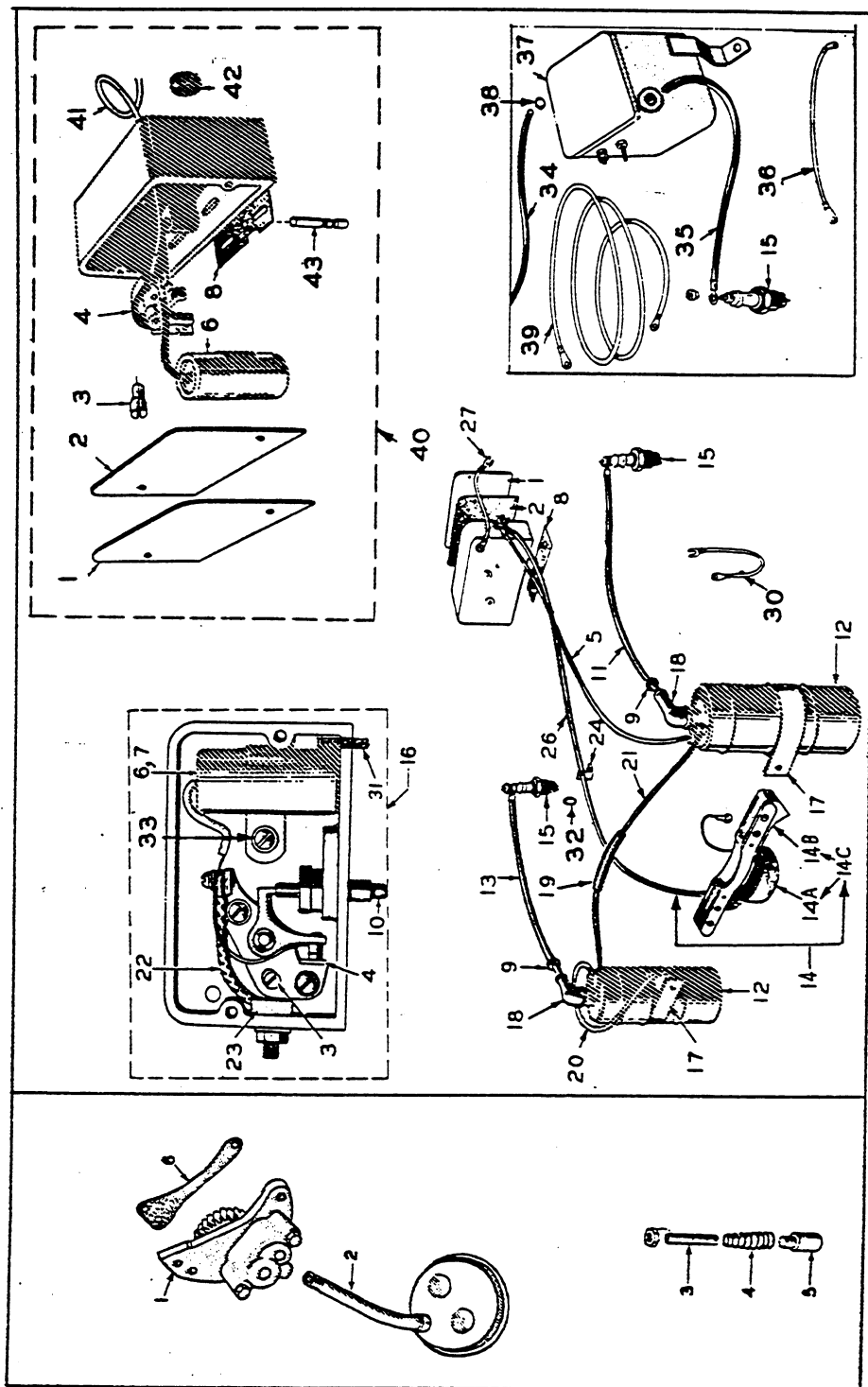


FIG. O-IGNITION GROUP

FIG. N-OIL PUMP GROUP

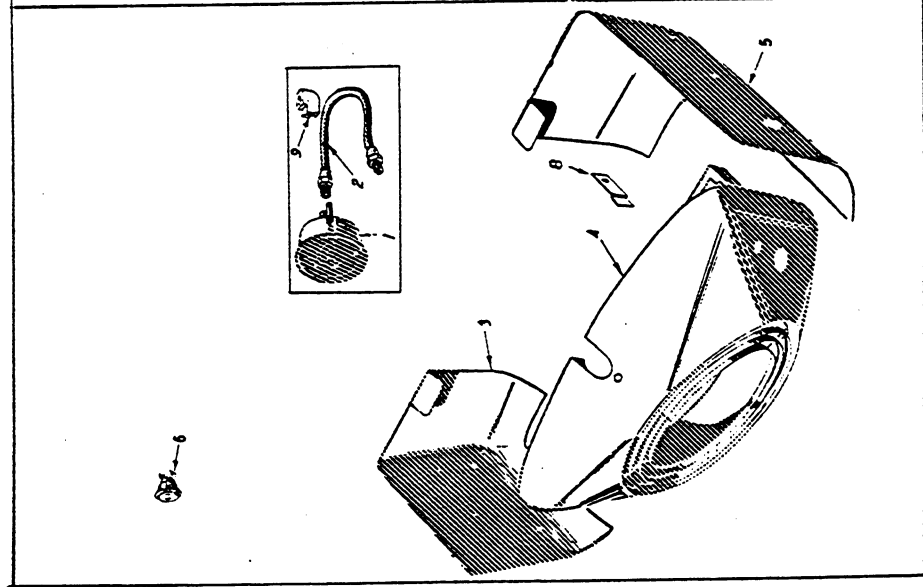
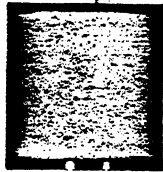
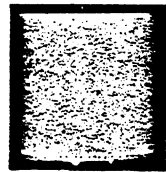


FIG. R-HOUSING GROUP

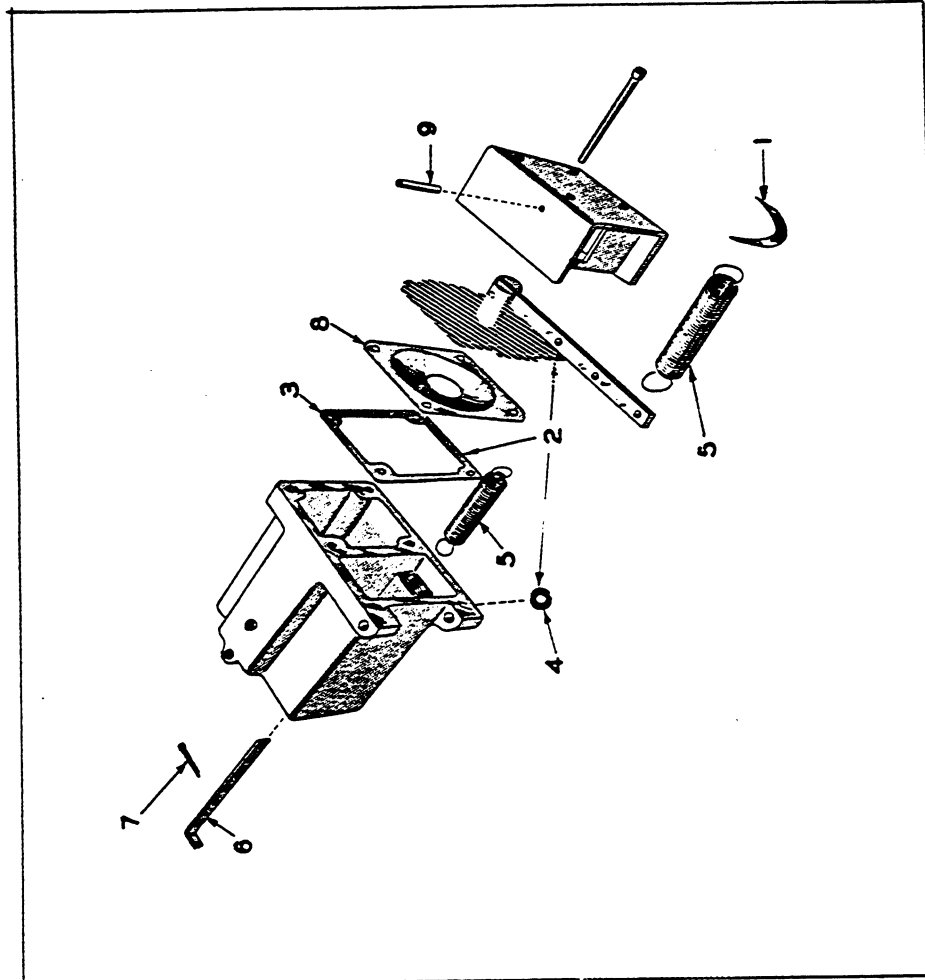


FIG. S-VACUUM SPEED-BOOSTER GROUP

REF. PART NO. NO.	DESCRIPTION	QUANTITY USED												
		FIG. A - CYLINDER BLOCK, OIL BASE AND GEAR COVER GROUP												
		G	H	J	K	L	M	N						
1	509-8 ✓ *Seal, Oil - Governor Shaft	1	1	1	1	1	1	1						
2	510-13 ✓ *Bearing, Governor Shaft - Upper	1	1	1	1	1	1	1						
3	150B41 Shaft and Arm, Governor - WITH an approximate 5/32" hole in shaft for mounting STAMPED type governor yoke	1	1	1	1	1	1	1						
3A	150-710 *Shaft and Arm, Governor - Includes #150A678 Sensitivity Adjusting Clip - WITH an approximate 7/32" hole in shaft for mounting FORGED type governor yoke (Replaces either #150B234 or #150A377 Assemblies)	1	1	1	1	1	1	1						
4	150A80 ✓ Yoke, Governor Shaft - STAMPED type (Has an approximate 5/32" diameter mounting stem)	1	1	1	1	1	1	1						
4	150A620 ✓ *Yoke, Governor Shaft - FORGED type (Has an approximate 7/32" diameter mounting stem)	1	1	1	1	1	1	1						
5	526-140 Washer, Governor Shaft Yoke (Use only on Yokes WITHOUT Retaining Ring Groove) Replaces either #150A76 or #150A233 Retaining Spring	1	1	1	1	1	1	1						
6	518-27 ✓ Nut, Spring - Yoke Retaining (Use only on Stamped type Yokes WITHOUT Cotter Pin Hole)	1	1	1	1	1	1	1						
6A	516-36 Pin, Cotter - Yoke Retaining (1/16" x 3/8") Use only on Forged Type Yokes WITHOUT Retaining Ring Groove	1	1	1	1	1	1	1						
6B	518-129 ✓ *Ring, Snap - Yoke Retaining (Use only on Forged type Yokes WITH Retaining Ring Groove)	1	1	1	1	1	1	1						
7	510-8 ✓ *Bearing, Governor Shaft - Lower	1	1	1	1	1	1	1						
8	510-14 ✓ *Ball, Governor Shaft Thrust	1	1	1	1	1	1	1						
9	103-207 Cover Assembly, Gear - Includes parts marked (*) plus Cover and hardware. (Note: This cover used to replace all previously used covers. Converts earlier models from sensitivity stud type of adjustment to adjustment by spring clip)	1	1	1	1	1	1	1						
10	103B11 ✓ Gasket, Gear Cover	1	1	1	1	1	1	1						
11	520A115 Stud, Gear Cover - 5/16" x 2-1/4"	1	1	1	1	1	1	1						
12	110K701 Block Kit, Cylinder - Includes Bearing Plate, Bearings, Studs, Dowel Pin, Valve Guides, Valve Seat Inserts, Camshaft Bearing Plug, Valve Compartment Cover	4	4	4	4	4	4	4						
13	123A73 ✓ Cap, Breather Tube	1	1	1	1	1	1	1						
	WHEN ORDERING PARTS BE SURE TO INCLUDE MODEL AND SERIAL NUMBER OF UNIT!	1	1	1	1	1	1	1						

WHEN ORDERING PARTS BE SURE TO INCLUDE MODEL AND SERIAL NUMBER OF UNIT

PARTS LIST

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REF. PART NO.	DESCRIPTION	QUANTITY USED										
		G	H	J	K	L	M	N				
FIG. A - CYLINDER BLOCK, OIL BASE AND GEAR COVER GROUP (Cont.)												
13A	123B293 Cap, Breather Tube	1	1	1	1	1	1	1	1	1	1	1
14	123A104 Valve, Breather	1	1	1	1	1	1	1	1	1	1	1
15	123A620 Tube, Breather (Replaces #123B129)	1	1	1	1	1	1	1	1	1	1	1
16	520A123 Stud, Valve Compartment - 1/4" x 2-5/8"	2	2	2	2	2	2	2	2	2	2	2
17	110A666 Cover, Valve Compartment (Replaces #110A121)	2	2	2	2	2	2	2	2	2	2	2
18	110A667 Gasket, Valve Compartment Cover (Replaces #110A110)	2	2	2	2	2	2	2	2	2	2	2
19	520A95 Stud, Intake Manifold Mounting - 3/8" x 2-7/8"	2	2	2	2	2	2	2	2	2	2	2
20	517-8 Plug, Expansion - Rear Camshaft Bearing Opening	1	1	1	1	1	1	1	1	1	1	1
21	520A114 Stud, Bearing Plate Mounting - 5/16" x 1-5/16"	5	5	5	5	5	5	5	5	5	5	5
22	520A78 Stud, Cylinder Head Mounting - 5/16" x 1-7/8"	10	10	10	10	10	10	10	10	10	10	10
23	150A136 Screw, Governor Sensitivity Adjusting - Use ONLY on units WITH sensitivity screw TAB on governor arm	1	1	1	1	1	1	1	1	1	1	1
24	150A678 Clip, Governor Sensitivity Adjusting - Use ONLY on Units WITHOUT sensitivity screw TAB on governor arm (Replaces either #150A309 or #150A591 Spring Clip & Stud Assemblies)	1	1	1	1	1	1	1	1	1	1	1
25	120A437 Line, Oil - Crankcase internal, to rear main bearing	1	1	1	1	1	1	1	1	1	1	1
26	102B8 Gasket, Oil Base	1	1	1	1	1	1	1	1	1	1	1
27	520A119 Stud, Oil Base Mounting - 3/8" x 1-5/16"	6	6	6	6	6	6	6	6	6	6	6
28	502-20 Elbow, Street - Oil Line Connection	1	1	1	1	1	1	1	1	1	1	1
29	110A697 Gasket, Cylinder Head (Replaces #110A124)	2	2	2	2	2	2	2	2	2	2	2
30	110A164 Head, Cylinder - Right Hand	1	1	1	1	1	1	1	1	1	1	1
30	110A163 Head, Cylinder - Left Hand	1	1	1	1	1	1	1	1	1	1	1
31	110A244 Nut, Long - Cylinder Head	4	4	4	4	4	4	4	4	4	4	4
31	110A445 Nut, Reg. (5/16-24) Hardened (14) Cylinder Head, (2) Muffler, (5) Bearing Plate, (5) Gear Cover	26	26	26	26	26	26	26	26	26	26	26
32	520A79 Stud, Cylinder Head Mounting - 5/16" x 1-5/8"	8	8	8	8	8	8	8	8	8	8	8
33	102B306 Base, Oil - 4 Quart - With Indicator and Cap and Front Oil Drain (Replaces earlier base used)	1	1	1	1	1	1	1	1	1	1	1
34	104A91 Nut, Hex - Oil Base Mounting (3/8-24) Hardened	6	6	6	6	6	6	6	6	6	6	6
35	505A110 Plug, Pipe- Oil Drain (3/8")	1	1	1	1	1	1	1	1	1	1	1
36	509-11 *Scal, Oil - Gear Cover	1	1	1	1	1	1	1	1	1	1	1
WHEN ORDERING PARTS BE SURE TO INCLUDE MODEL AND SERIAL NUMBER OF UNIT!												

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REF. PART NO. NO.	DESCRIPTION	QUANTITY USED										
		G	H	J	K	L	M	N				
FIG. A - CYLINDER BLOCK, OIL BASE AND GEAR COVER GROUP (Cont.)												
37	516A11 Pin, Dowel - Gear Cover Mounting	2	2	2	2	2	2	2	2	2	2	2
38	520A333 Stud, Gear Cover Mounting - 5/16" x 3-1/8"	1	1	1	1	1	1	1	1	1	1	1
39	101K181 Bearing Kit, Crankshaft - Front or Rear - Precision Type - Available in Std., .002" or .020" Undersize - Specify	2	2	2	2	2	2	2	2	2	2	2
40	101K115 Gasket Kit, Bearing Plate Mounting	1	1	1	1	1	1	1	1	1	1	1
41	509-1 Seal, Oil - Bearing Plate	1	1	1	1	1	1	1	1	1	1	1
42	101C258 Plate only, Bearing - EXCLUDES Bearing	1	1	1	1	1	1	1	1	1	1	1
43	101A49 Bearing, Camshaft - Front	1	1	1	1	1	1	1	1	1	1	1
44	101A50 Bearing, Camshaft - Rear	1	1	1	1	1	1	1	1	1	1	1
45	516-130 *Pin, Roll - Governor Cup Stop - Mounted in Gear Cover (Replaces #516-117 Pin)	1	1	1	1	1	1	1	1	1	1	1
46	516A72 Pin, Steel - Main Bearing	2	2	2	2	2	2	2	2	2	2	2
47	505-130 Plug, Pipe - Oil Fill (3/4")	2	2	2	2	2	2	2	2	2	2	2
48	123A491 Indicator and Cap, Oil Fill	1	1	1	1	1	1	1	1	1	1	1
49	123A191 Gasket, Oil Fill Cap	1	1	1	1	1	1	1	1	1	1	1
FIG. B - VALVE GROUP												
1	110A104 Valve, Intake	2	2	2	2	2	2	2	2	2	2	2
2	110A473 Valve, Exhaust - Std. (Replaces #110A288 used prior to Spec. J)	2	2	2	2	2	2	2	2	2	2	2
2	110A444 Valve, Exhaust - Stellite Faced - (Optional material)	2	2	2	2	2	2	2	2	2	2	2
3	110A176 Seat, Exhaust Valve-Std.-Available .002", .010", .025", .027"OS-Specify.	2	2	2	2	2	2	2	2	2	2	2
3	110A245 Seat, Exhaust Valve-Stellite-Optional material-Available .002", .010", .025", .027" Oversize - Specify	2	2	2	2	2	2	2	2	2	2	2
3	110A197 Seat, Intake Valve	2	2	2	2	2	2	2	2	2	2	2
4	110A443 Guide, Valve	4	4	4	4	4	4	4	4	4	4	4
5	110A68 Gasket, Valve Guide	4	4	4	4	4	4	4	4	4	4	4
6	110A7 Spring, Valve	4	4	4	4	4	4	4	4	4	4	4
7	110A6 Retainer, Valve Spring	4	4	4	4	4	4	4	4	4	4	4
8	110A8 Lock, Spring Retainer	8	8	8	8	8	8	8	8	8	8	8
9	115A6 Tappet, Valve	4	4	4	4	4	4	4	4	4	4	4

WHEN ORDERING PARTS BE SURE TO INCLUDE MODEL AND SERIAL NUMBER OF UNIT!

PARTS LIST

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REF. PART NO.	DESCRIPTION	QUANTITY USED									
		G	H	J	K	L	M	N			
FIG. C - CRANKSHAFT AND FLYWHEEL GROUP											
3	526A17	Washer, Flywheel Mounting	1	1	1	1	1	1	1	1	1
4	515-2	Key, Flywheel - Steel - Woodruff #9	1	1	1	1	1	1	1	1	1
4	515A112	Key, Flywheel - Aluminum	1	1	1	1	1	1	1	1	1
5	515-1	Key, Crankshaft Gear - Woodruff #3	1	1	1	1	1	1	1	1	1
7	160K622	Flywheel, Magneto (Replaces #160D61) Includes Stator Assy.	1	1	1	1	1	1	1	1	1
7B	160D202	Flywheel, Magneto - Replaces 160A464	1	1	1	1	1	1	1	1	1
7C	160B222	Sheave, Rope - Flywheel									
8	518-14	Ring, Retainer - Crankshaft Gear									
9	104A43	Washer, Crankshaft Gear	1	1	1	1	1	1	1	1	1
10	105-72	Gear Set - Includes Crankshaft and Camshaft Gears	1	1	1	1	1	1	1	1	1
11	104D72	Crankshaft	1	1	1	1	1	1	1	1	1
12	192A83	Rope and Handle, Manual Starting - Inter. with 192A16	1	1	1	1	1	1	1	1	1
13	104A181	Screw Set, Flywheel Mounting - Includes 2-1/2" and 4" screw	1	1	1	1	1	1	1	1	1
FIG. D - CAMSHAFT GROUP											
1	150A78	Ring, Snap - Center Pin	1	1	1	1	1	1	1	1	1
2	150B105	Cup, Governor - Includes Pin #516-71 -	1	1	1	1	1	1	1	1	1
2	150B612	Cup, Governor - No Stop Pin in Cup; Requires Pin in Gear Cover ..	10	10	10	10	10	10	10	10	10
3	510-15	Ball, Fly - Governor	1	1	1	1	1	1	1	1	1
4	150B85	Spacer, Flyball	1	1	1	1	1	1	1	1	1
5	150A77	Plate, Flyball	1	1	1	1	1	1	1	1	1
6	105-72	Gear Set - Includes Crankshaft and Camshaft Gears	1	1	1	1	1	1	1	1	1
7	105A4	Washer, Thrust - Camshaft Gear	1	1	1	1	1	1	1	1	1

WHEN ORDERING PARTS BE SURE TO INCLUDE MODEL AND SERIAL NUMBER OF UNIT!

REF. PART NO. NO.	DESCRIPTION	QUANTITY USED							
		G	H	J	K	L	M	N	
FIG. D - CAMSHAFT GROUP (CONT.)									
8	515-1 Key, Camshaft Gear - Woodruff #3	1	1	1	1	1	1	1	1
9	105-77 Camshaft - Includes Center Pin	1	1	1	1	1	1	1	1
10	516-71 Pin, Governor Cup - Mtd. In Cup - See Gear Cover for Later Pin ..	1	1	1	1	1	1	1	1
	150A75 Pin, Camshaft Center	1	1	1	1	1	1	1	1
FIG. E - PISTON AND CONNECTING ROD GROUP									
1	113A7 Ring, Compression - Standard - .010", .020", .030" Oversize Available - Specify	4	4	4	4	4	4	4	4
2	113A8 Ring, Oil Control, Standard - .010", .020", .030" Oversize Available - Specify	2	2	2	2	2	2	2	2
	113-51 Ring Set, Expander-Chrome Faced-Optional-Standard, .010", .020", .030" Oversize - Specify	2	2	2	2	2	2	2	2
3	112-33 Piston, with Pin - Standard - .005", .010", .020", .030", Oversize Available - Specify	2	2	2	2	2	2	2	2
4	112A10 Pin, Piston - Standard - .002" - .005" Oversize Available- Specify.	2	2	2	2	2	2	2	2
5	112A3 Ring, Lock - Piston Pin	4	4	4	4	4	4	4	4
6	114B9 Rod, Connecting - Standard - .020" Undersize Avail.- Specify - Prior Serial #409955	2	2						
6	114B45 Rod, Connecting - Standard - .020" Undersize Avail.- Specify - Begin with Serial #409955. Use only with 112-33 Piston			2	2	2	2	2	2
7	113-11 Ring Set, Piston - Standard - Available in .010", .020", .030" Oversize - Specify (Use Standard size rings on .005 Oversize Piston).	2	2	2	2	2	2	2	2
8	110A284 Screw, Connecting Rod Cap - Replaces #114A10	4	4	4	4	4	4	4	4
9	114A59 Washer, Lock - Connecting Rod Screw	4	4	4	4	4	4	4	4
(A)- 114B9 is furnished if 114B45 is requested and serial number is not known.									

(A) - 114B9 is furnished if 114B45 is requested and serial number is not known.

WHEN ORDERING PARTS BE SURE TO INCLUDE MODEL AND SERIAL NUMBER OF UNIT!

PARTS LIST

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REF. PART NO.	DESCRIPTION	QUANTITY USED										
		G	H	J	K	L	M	N				
1	145A48	1	1	1	1	1	1	1				
1A	Inlet, Carburetor Air - Metal											
2	145A80	2	2	2	3	3	3	3				
3	503-280	1	1	1	1	1	1	1				
3A	503A37											
3A	503A117											
3A	503A281											
3B	140A211											
4	503A19	1	1	1	1	1	1	1				
4	503-107											
5	502-2											
6	142A57	1	1	1	1	1	1	1				
7	155A243	1	1	1	1	1	1	1				
8	140C79	1	1	1	1	1	1	1				
9	154A22	2	2	2	2	2	2	2				
10	141A78	1	1	1	1	1	1	1				
11	149A174	1	1	1	1	1	1	1				
12	154C18	1	1	1	1	1	1	1				
12	154C241	1	1	1	1	1	1	1				
13	154A13	2	2	2	2	2	2	2				
14	149D693	2	2	2	2	2	2	2				
15	149A45	1	1	1	1	1	1	1				
16	149A3	2	2	2	2	2	2	2				
17	502-3	1	1	1	1	1	1	1				
18	140K403	1	1	1	1	1	1	1				
19	140-68	1	1	1	1	1	1	1				
20	149A648	1	1	1	1	1	1	1				

FIG. F - FUEL SYSTEM GROUP

WHEN ORDERING PARTS BE SURE TO INCLUDE MODEL AND SERIAL NUMBER OF UNIT!

REF. PART NO.	DESCRIPTION	QUANTITY USED									
		G	H	J	K	L	M	N			
FIG. F - FUEL SYSTEM GROUP (CONT.)											
21	Nipple, Pipe - Filter to Carburetor - 1/8"x2"	1	1	1	1	1	1	1	1	1	1
22	Filter, Fuel - (Replaces 149-180)	1	1	1	1	1	1	1	1	1	1
23	Bowl, Fuel Filter	1	1	1	1	1	1	1	1	1	1
24	Gasket, Fuel Filter	1	1	1	1	1	1	1	1	1	1
25	Screw, Hex Head Cap - Hardened - 5/16-24x1-1/4" - Muffler Mounting	2	2	2	2	2	2	2	2	2	2
26	Tank, Fuel - 2 U.S. Gallon - For Rear Mounting	1	1	1	1	1	1	1	1	1	1
27	Cap Assembly, Fuel Tank - Replaces #159A80	1	1	1	1	1	1	1	1	1	1
28	Bracket, Fuel Tank, Left Hand	1	1	1	1	1	1	1	1	1	1
29	Bracket, Fuel Tank, Right Hand	1	1	1	1	1	1	1	1	1	1
30	Strap, Tank Retaining	2	2	2	2	2	2	2	2	2	2
31	Brace, Tank	1	1	1	1	1	1	1	1	1	1
32	Line, Flex. Fuel	1	1	1	1	1	1	1	1	1	1
33	Stud, Fuel Tank Mounting	1	1	1	1	1	1	1	1	1	1
34	Valve, Fuel Shutoff	1	1	1	1	1	1	1	1	1	1
35	Strainer Assembly, Fuel- Tank Outlet	1	1	1	1	1	1	1	1	1	1
If fuel pump with priming feature is desired for engines prior to Serial # 458109, order 149D693 pump and 149A648 priming rod.											
FIG. G - CARBURETOR PARTS GROUP											
142A57	Carburetor Assembly	1	1	1	1	1	1	1	1	1	1
142-33	*Gasket Kit, Carburetor	1	1	1	1	1	1	1	1	1	1
142K295	Repair Kit, Carburetor - Includes Parts Marked (*)	1	1	1	1	1	1	1	1	1	1
815-109	Screw, Bowl Cover - #10-24 x 5/8"	2	2	2	2	2	2	2	2	2	2
815-103	Screw, Bowl Cover - #10-24 x 1/2"	1	1	1	1	1	1	1	1	1	1
815-91	*Screw, Choke Valve Plate - Replaces #142-28	2	2	2	2	2	2	2	2	2	2
142-55	Plate, Choke Valve	1	1	1	1	1	1	1	1	1	1

WHEN ORDERING PARTS BE SURE TO INCLUDE MODEL AND SERIAL NUMBER OF UNIT!

PARTS LIST

17

REF. PART NO.	PART NO.	DESCRIPTION	QUANTITY USED										
			G	H	J	K	L	M	N				
5	142-217	Shaft, Choke	1	1	1	1	1	1	1				1
6	142-39	*Shaft, Float	1	1	1	1	1	1	1				1
7	142-31	Gasket, Bowl Cover	1	1	1	1	1	1	1				1
8	148A17	Gasket, Fuel Valve or Main Adj. Retainer	2	2	2	2	2	2	2				2
9	142-49	*Valve, Fuel	1	1	1	1	1	1	1				1
10	142-32	Gasket, Nozzle	1	1	1	1	1	1	1				1
11	142-285	Nozzle - Replaces #142-289	1	1	1	1	1	1	1				1
12	142-38 ^{034/}	Float	1	1	1	1	1	1	1				1
13	145A8	*Lever, Throttle Stop	1	1	1	1	1	1	1				1
14	142-40	*Needle, Idle Adj.	1	1	1	1	1	1	1				1
15	142-282	Spring, Idle Needle	1	1	1	1	1	1	1				1
16	142A35	Spring, Throttle Stop Screw	1	1	1	1	1	1	1				1
17	812-65	*Screw, Throttle Stop - #8-32x5/8"	1	1	1	1	1	1	1				1
18	815-72	Screw, Throttle Plate - Replaces #142-281	2	2	2	2	2	2	2				2
19	142-25	Plate, Throttle Valve	1	1	1	1	1	1	1				1
20	142A368	*Shaft, Throttle - Replaces #142A269	1	1	1	1	1	1	1				1
21	142-290	Nut - Jet, Use Only with 142-285	1	1	1	1	1	1	1				1
21, 11	142-309	Nozzle Assembly - Includes 142-285 and 142-290	1	1	1	1	1	1	1				1
22	142-46	Retainer, Main Adj. Needle	1	1	1	1	1	1	1				1
23	142-208	Packing, Main Adj. Needle	1	1	1	1	1	1	1				1
24	142-45	Retainer, Packing	1	1	1	1	1	1	1				1
25	510A27	Pin, Main Adj. Needle	1	1	1	1	1	1	1				1
26	142-41	*Needle, Main Adj. - Includes Pin	1	1	1	1	1	1	1				1
27		Bowl - Order Complete Carburetor											
28	505-53	Plug, Fuel Inlet Boss	1	1	1	1	1	1	1				1
29	142-343	Bushing, Oilite - Throttle Shaft											2

FIG. G - CARBURETOR PARTS GROUP (CONT.)

WHEN ORDERING PARTS BE SURE TO INCLUDE MODEL AND SERIAL NUMBER OF UNIT

REF. PART NO. NO.	DESCRIPTION	QUANTITY USED										
		G	H	J	K	L	M	N				
Various # 149D693	Pump. Fuel - AC mfr., BLAKING mfr. - Use 149D693 Pump Pump, Fuel - ONAN mfr., with primer lever - Replaces earlier style pumps used, of any manufacture.....	1	1	1	1	1	1	1				1
149K526	Repair Kit, Fuel Pump - Includes parts marked (*) - For ONAN mfr. or BLAKING mfr. pumps only - If not available, or if pump mfr. is not known, then use 149K74											1
149K74	Repair Kit, Fuel Pump - Includes parts marked (*) and A) - For AC mfr., BLAKING mfr. or ONAN mfr. pumps	1	1	1	1	1	1	1				1
815-148	Body, Upper - Not Sold Separately	x	x	x	x	x	x	x				x
815-147	Screw, Body - #8-32 x 7/8"	4	4	4	4	4	4	4				x
149-241	Screw, Valve Retainer - #6-32 x 5/8" - ONAN mfr. pump only											4
814-62	Screw, Valve Retainer - BLAKING mfr. pump only - #6-32 x 7/16" ..	1	1	1	1	1	1	1				2
149-96	*Valve and Cage - BLAKING mfr. & ONAN mfr. pump	2	2	2	2	2	2	2				2
4A	*Valve Parts - AC mfr. - Use Kit #149K74	x	x	x	x	x	x	x				2
149A95	*Gasket, Valve - BLAKING mfr. & ONAN mfr. pump	2	2	2	2	2	2	2				2
149A582	*Diaphragm Assembly	1	1	1	1	1	1	1				1
149A672	*Spring, Diaphragm - Replaces #149A93	1	1	1	1	1	1	1				1
149A539	Retainer - Valve Cage - ONAN & BLAKING mfr. pump only. J.....	1	1	1	1	1	1	1				1
149-243	Retainer, Valve - AC Mfr.	1	1	1	1	1	1	1				1
149A159	*Gasket - Spacer - BLAKING mfr. pump only	2	2	2	2	2	2	2				2
149A675	*Spring, Rocker Arm - Replaces #149A94	1	1	1	1	1	1	1				1
516A113	Pin, Rocker Arm	1	1	1	1	1	1	1				1
518-129	Body, Lower - Not Sold Separately											1
149-710	Ring, "E" Retainer - Primer Lever Shaft - ONAN mfr. pump only.	x	x	x	x	x	x	x				1
149A551	Arm & Link Set, Rocker - Sold only as a set.	1	1	1	1	1	1	1				1
509-65	Lever, Hand Primer - ONAN mfr. pump only											1
149A404	Seal, "O" Ring - ONAN mfr. pump only											2
149A3	*Spring, Priming Lever Return - ONAN mfr. pump	2	2	2	2	2	2	2				1
	*Gasket, Fuel Pump Mounting											2

NOTE: Manufacturer appears on pump for identification. After installing a new fuel pump on an earlier engine, select parts by pump mfr. (manufacturer) rather than by the quantity used column.

PARTS LIST

19

REF. PART NO. NO.	DESCRIPTION	QUANTITY USED												
		G	H	J	K	L	M	N						
FIG. N - OIL PUMP GROUP														
NOTE: Larger Intake Cup plus corresponding Oil Pump will fit earlier engines.														
1	120A200	Pump, Oil - With 1/8" pipe tap	1	1	1	1	1	1	1	1	1	1	1	1
1	120A491	Pump, Oil - With 1/4" pipe tap - Replaces #120A394	1	1	1	1	1	1	1	1	1	1	1	1
2	120A88	Cup, Oil Pump Intake - With 1/8" pipe thread	1	1	1	1	1	1	1	1	1	1	1	1
2	120B400	Cup, Oil Pump Intake - With 1/4" pipe thread	1	1	1	1	1	1	1	1	1	1	1	1
3	120A187	Stud and Nut, Oil Pressure Adjusting	1	1	1	1	1	1	1	1	1	1	1	1
4	120A140	Spring, By-Pass Valve	1	1	1	1	1	1	1	1	1	1	1	1
5	120A398	Valve, By-Pass - Replaces 120A12	1	1	1	1	1	1	1	1	1	1	1	1
6	120A192	Gasket, Oil Pump Mounting	1	1	1	1	1	1	1	1	1	1	1	1
FIG. O - IGNITION GROUP														
1	160A152	Cover, Breaker Box	1	1	1	1	1	1	1	1	1	1	1	1
2	160A150	Gasket, Breaker Box Cover	1	1	1	1	1	1	1	1	1	1	1	1
3	160A75	Cam, Point Adjusting	1	1	1	1	1	1	1	1	1	1	1	1
4	160A2	Point Set, Breaker	1	1	1	1	1	1	1	1	1	1	1	1
5	336A515	Lead, Coll to Breaker Box	1	1	1	1	1	1	1	1	1	1	1	1
6	312A19	Condenser, Ignition - 0.5 Mfd.	1	1	1	1	1	1	1	1	1	1	1	1
6	312A69	Condenser, Ignition - 0.3 Mfd.	1	1	1	1	1	1	1	1	1	1	1	1
8	160A43	Gasket, Breaker Box Mounting	1	1	1	1	1	1	1	1	1	1	1	1
9	508-5	Grommet, Spark Plug Cable	1	1	1	1	1	1	1	1	1	1	1	1
10	160A262	Plunger, Breaker Box - Includes Diaphragm and Guide	1	2	2	2	2	2	2	2	2	2	2	2
11	167A1097	Cable, Spark Plug - Right Hand - 9"	1	1	1	1	1	1	1	1	1	1	1	1
12	166B288	Coil, Ignition - 6 Volt, for mounting in blower housing - Repl. #166-91	2	2	2	2	2	2	2	2	2	2	2	2
13	167A1071	Cable, Spark Plug - Left Hand - 7" - Replaces #107A1098	1	1	1	1	1	1	1	1	1	1	1	1
14	160A56	Stator, Magneto - Includes Coil, Pole Shoe, and Lead	1	1	1	1	1	1	1	1	1	1	1	1
14A	160A282	Coil, Magneto												
14B	160A281	Pole Shoe, Magneto												
14C	162A196	Stator Assembly, Magneto - order component parts												
15	167-28	Plug, Spark	2	2	2	2	2	2	2	2	2	2	2	2
16	160B250	Box Assembly, Breaker - Complete	2	2	2	2	2	2	2	2	2	2	2	2
16	160A257	Box Assembly, Breaker - Complete	1	1	1	1	1	1	1	1	1	1	1	1

WHEN ORDERING PARTS BE SURE TO INCLUDE MODEL AND SERIAL NUMBER OF UNIT!

REF. PART NO. NO.	DESCRIPTION	QUANTITY USED										
		G	H	J	K	L	M	N				
FIG. O - IGNITION GROUP (CONT.)												
17	166A104		2	2								2
17	166A141		2	2	2	2	2	2	2	2	2	2
	Clamp, Ignition Coil - Prior to Serial #420327											
	Clamp, Ignition Coil - Begin with Serial #420327 - Requires											
	Slot in Housing											
18	160A558											
19	503-92		1	1	1	1	1	1	1	1	1	1
20	336A481		1	1	1	1	1	1	1	1	1	1
21	336A500		1	1	1	1	1	1	1	1	1	1
22	160A428		1	1	1	1	1	1	1	1	1	1
23	160A349											
24	332A273											
26	336A521	1										
27	336A439		1	1	1	1	1	1	1	1	1	1
30	336A491											
31	160A261		1	1	1	1	1	1	1	1	1	1
32	508-2											
33	518-49											
34	167A1071		1	1	1	1	1	1	1	1	1	1
35	167A1072		1	1	1	1	1	1	1	1	1	1
	Cable, Spark Plug - Long - 12 Volt Coil to Left Hand or #1 Plug ...											
	Cable, Spark Plug - Short - 12 Volt Coil to Right Hand or											
	#2 Plug											
36	336A388		1	1	1	1	1	1	1	1	1	1
37	160B86		1	1	1	1	1	1	1	1	1	1
38	509-20		2	2	2	2	2	2	2	2	2	2
39	226A166		1	1	1	1	1	1	1	1	1	1
40	160B154											
	Box Assembly, Breaker - Dustproof but not diaphragm type - Use											
	#160B250- Prior to Spec. J		1	1	1	1	1	1	1	1	1	1
41	336A374		1	1	1	1	1	1	1	1	1	1
42	508-27		1	1	1	1	1	1	1	1	1	1
43	160A36		1	1	1	1	1	1	1	1	1	1
	Grommet, Coil to Breaker Point Terminal											
	Plunger, Ignition Breaker - No spacer and no diaphragm, type											

WHEN ORDERING PARTS BE SURE TO INCLUDE MODEL AND SERIAL NUMBER OF UNIT!

REF. PART NO.	DESCRIPTION	QUANTITY USED									
		G	H	J	K	L	M	N			
FIG. P - GOVERNOR GROUP											
1	150A136 Screw, Governor Sensitivity Adjusting - Use ONLY on units WITH sensitivity screw TAB on governor arm (Listed also in Fig. A Grouping)	1	1	1							
1A	150A678 Clip, Governor Sensitivity Adjusting - Use ONLY on units WITHOUT sensitivity screw TAB on governor arm (Replace either #150A309 or #150A591 Spring Clip and Stud Assemblies) Listed also in Fig. A Grouping										
2	150A115 Spring, Governor	1	1	1	1	1	1	1			
3	150A96 Stud, Governor Spring Tension Adjusting (#10-32 thrd) Not used on certain early units	1	1	1	1	1	1	1			
4	150A639 Joint, Ball - Governor Link (Replaces either #150A29, #150-128 or #150A300 Ball Joint)	1	1	1	1	1	1	1			
5	150A629 Link, Governor to Carburetor (Note: If old link fastens by a cotter pin, use also Clip #518-6)	1	1	1	1	1	1	1			
6	518-6 Clip, End - Governor to Carburetor Link (Replaces Cotter Pin #516-36)	1	1	1	1	1	1	1			
FIG. Q - VARIABLE SPEED GOVERNOR GROUP											
150C314	Control Assembly, Governor - Variable Speed - Complete (Replaces #150C165 Assembly used for Columns G and H)			1	1	1	1	1			
1	518-4 Clip, Rod End			1	1	1	1	1			
2	150A167 Arm Assembly, Pivot - Includes Mounting Bracket			1	1	1	1	1			
3	152B39 Throttle Assembly, Hand - Prior to Spec H - Use #152B45	1	1	1	1	1	1	1			
3A	152B45 Variable Speed and Quadrant Assembly - Includes parts marked (†) plus hardware										
4	150A176 Rod	1	1	1	1	1	1	1			
5	152A44 † Quadrant	1	1	1	1	1	1	1			

WHEN ORDERING PARTS BE SURE TO INCLUDE MODEL AND SERIAL NUMBER OF UNIT!

REF. PART NO.	DESCRIPTION	QUANTITY USED										
		G	H	J	K	L	M	N				
FIG. Q - VARIABLE SPEED GOVERNOR GROUP (Cont.)												
6	Lever, Throttle - Without provision for locking position - Order Lever #152A34, Stud and Bracket #152A70 and Nut #865-11	1	1	1	1	1	1	1				1
6	† Lever, Throttle - With provision for locking position	1	1	1	1	1	1	1				1
7	† Lever, Choke	1	1	1	1	1	1	1				1
8	† Link, Choke	1	1	1	1	1	1	1				1
9	† Bracket, Lever	1	1	1	1	1	1	1				1
10	† Stud, Gear Cover to Crankcase	1	1	1	1	1	1	1				1
11	† Washer, Tension - Lever Assembly	2	2	2	2	2	2	2				2
12	† Stud and Bracket - Throttle Lever Locking	1	1	1	1	1	1	1				1
13	† Nut, Wing - Throttle Lever Locking (Replaces #871-74)	1	1	1	1	1	1	1				1
FIG. R - HOUSING GROUP												
1	Gauge, Oil Pressure - with Plastic Face Shield - Includes Clamp (Replaces 193-5)	1	1	1	1	1	1	1				1
2	Line, Oil	1	1	1	1	1	1	1				1
3	Housing, Cylinder Air - Left Hand - Replaces #134C30	1	1	1	1	1	1	1				1
4	Housing, Blower	1	1	1	1	1	1	1				1
4	Housing, Blower - Replaces #134D24	1	1	1	1	1	1	1				1
5	Housing, Cylinder Air - Right Hand - Replaces #134C31	1	1	1	1	1	1	1				1
6	Button, Stop - Less Lead	1	1	1	1	1	1	1				1
8	Clip, Air Housing	1	1	1	1	1	1	1				1
9	Elbow, Inverted Female - Oil Gauge	1	1	1	1	1	1	1				1
313-8	Button, Stop - Replaces #313-11	1	1	1	1	1	1	1				1
FIG. S - VACUUM SPEED-BOOSTER GROUP												
150K433	Kit, Booster Replacement - Complete with external spring and mounting gasket											1
1	150A430 Bracket, Spring to Governor Link											1
2	150K434 Kit, Diaphragm Replacement - Includes gaskets											1
3	150A668 Gasket, Diaphragm Plate - Replaces #150A374											1

WHEN ORDERING PARTS BE SURE TO INCLUDE MODEL AND SERIAL NUMBER OF UNIT

REF. PART NO.	DESCRIPTION	QUANTITY USED										
		G	H	J	K	L	M	N				
FIG. 8. - VACUUM SPEED-BOOSTER GROUP (CONT.)												
4	Gasket, Neoprene - Booster to Manifold					1	1					1
5	Spring - Internal or External					2	2					2
6	Bracket, Internal Spring Adjusting					1	1					1
7	Pin, Cotter - 3/32"x5/8" - Adjusting Bracket					1	1					1
8	Plate, Diaphragm - Replaces #150A373					1	1					1
9	Pin, Roll - 3/32x3/4" - Diaphragm Lever Pivot					1	1					1
SERVICE KITS												
101K181	Kit, Main Bearing Replacement - Precision Type - Includes Stop Pin - Available In: Standard Size; .002" Undersize, for worn engines; or .020" Undersize for re-machined crankshaft bearing Journal. Please Specify Size!	2	2	2	2	2	2					2
101K115	Kit, Rear Bearing Plate Gasket	1	1	1	1	1	1					1
168K29	Kit, Engine Gasket	1	1	1	1	1	1					1
522K72	Kit, Overhaul	1	1	1	1	1	1					1
149K74	Kit, Fuel Pump Repair Parts - For AC, Blaking, or Onan Mfr. Pump	1	1	1	1	1	1					1
149K526	Kit, Fuel Pump Repair Parts - For Blaking or Onan Mfr. Pump Only - If not available, use Kit 149K74	1	1	1	1	1	1					x
142-33	Kit, Carburetor Gasket	1	1	1	1	1	1					1
142K295	Kit, Carburetor Repair Parts	1	1	1	1	1	1					1

WHEN ORDERING PARTS BE SURE TO INCLUDE MODEL AND SERIAL NUMBER OF UNIT

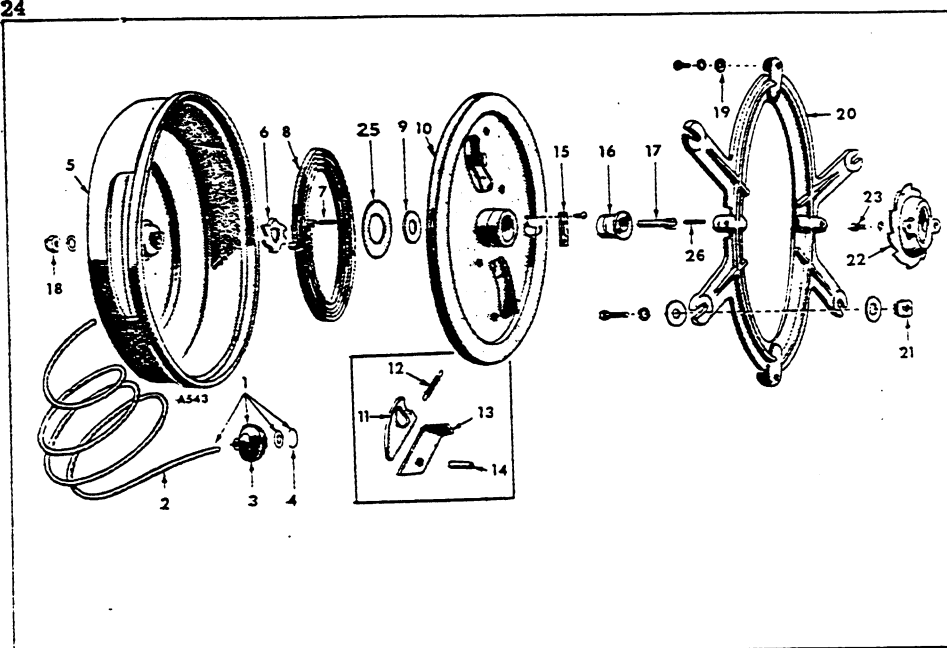


FIG. T READI-PULL STARTER GROUP (MODEL D)

REF. NO.	PART NO.	DESCRIPTION	QTY
FIG. T - READI-PULL STARTER GROUP (MODEL D) - OPTIONAL			
	192K215	Kit, Complete Model "D" Starter - Includes Mounting Ring and Ratchet Wheel	1
1	192A45	Rope and Grip Assembly	1
2	192-43	Rope Only. Starter - #7 Nylon x 83" Long	1
3	192A44	Grip Only. Ball - Rubber	1
4	517A25	Plug, Starter Rope Grip	1
5	192B152	Cover, Starter	1
6	192A153	Wheel, Cog - Anti-Backlash	1
7	516-83	Pin, Roll - 3/16" x 5/8" - Recoil Spring	1
8	192A39	Spring, Recoil	1
9	526A123	Washer, Thrust - Sheave Bushing to Cover	1
10	192B180	Sheave Assembly, Rope - Includes parts marked * plus hardware	1
11	192A172	*Pawl	2
12	192A165	*Spring, Pawl	2
13	192A168	*Arm, Ratchet	2
14	516A110	*Pin, Roll - 5/16 x 1/2 - (2) Arm Pivot, (2) Pawl Pivot	4
15	192A167	*Clamp, Rope	1
16	192A163	Bearing, Sheave Hub - Bronze	1
17	192A323	Capscrew, Socket Head - 3/18-16 x 1-1/2" - Sheave Bushing to Cover	1
18	870-138	Nut, Flexlock - Bushing to Cover Screw	1
19	526A21	Washer - Starter to Mounting Ring - Replaces 192A185	4
20	192C186	Ring, Mounting - Starter to Blower Housing	1
21	870-110	Nut, Speed Grip - Starter Ring to Blower Housing	4
22	192A170	Wheel, Ratchet	1
23	192A218	Capscrew, Socket Head - Ratchet Wheel to Flywheel - 3/8-16 x 5/8" with provision for starter installation alignment	2
24	815-137	*Screw, Rope Clamp Mounting	2
25	526A168	Washer, Spring Retainer (Used on Later Model Starters)	1
26	516-132	Pin, Spirol Starter Locating (Used on Later Model Starters)	1